

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

CONSERVATION LAW FOUNDATION,
INC.,

Plaintiff,

v.

TOWN OF BARNSTABLE,
MASSACHUSETTS,

Defendant.

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Civil Action No. 21-cv-10258-ADB

MEMORANDUM AND ORDER ON DEFENDANT’S MOTION TO DISMISS

BURROUGHS, D.J.

The Lewis Bay Watershed System, a vital resource for surrounding coastal communities in Cape Cod, is currently threatened by excessive nitrogen pollution. If left unabated, the degradation resulting from nitrogen pollution will greatly reduce, or perhaps even eliminate, the commercial and recreational uses of the Lewis Bay waters. These facts are undisputed.

In an effort to curb nitrogen discharge into the Bay, Plaintiff Conservation Law Foundation, Inc. (“CLF”) has brought the instant action against the Town of Barnstable (“Barnstable”) under the Clean Water Act (“CWA”). 33 U.S.C. § 1251 *et seq.* (1972). CLF alleges that Barnstable violated § 1311(a) of the CWA by discharging nitrogen-laden septic wastewater, termed “effluent,” from its wastewater treatment facility in Hyannis, Massachusetts into the Lewis Bay Watershed System without a National Pollutant Discharge Elimination System (“NPDES”) permit from the Environmental Protection Agency (“EPA”). [ECF No. 1 (“Compl.”)].

Pending before the Court is Barnstable’s motion to dismiss. [ECF No. 17]. In the Court’s view, pollution—and climate change more broadly—are among the most important issues confronting humanity. Its resolution of this motion, however, is constrained by the applicable law as enacted by the United States Congress and as articulated by the Supreme Court of the United States. Therefore—though it does not do so lightly—the Court GRANTS the motion, [ECF No. 17], for the reasons stated below.

I. BACKGROUND

A. Factual Background

The following facts are drawn from CLF’s complaint and viewed in the light most favorable to CLF. Ruivo v. Wells Fargo Bank, N.A., 766 F.3d 87, 90 (1st Cir. 2014) (citation omitted).

CLF is a “nonprofit, member-supported, regional organization dedicated to protecting New England’s environment.” [Compl. ¶ 24]. Barnstable is a municipality that owns and operates the Barnstable Water Pollution Control Facility (“Facility”) in Hyannis, Massachusetts. [Id. ¶ 64]. Barnstable currently operates the Facility under a Groundwater Discharge Permit issued by the Massachusetts Department of Environmental Protection (“MassDEP”). [Id. ¶ 73].¹ The Facility serves as “primary wastewater treatment facility for approximately 2,900 properties in Hyannis,” collecting wastewater from a network of 55 miles of pipes and 27 pumping stations. [Id. ¶¶ 65–66]. Once raw sewage has been treated and partially denitrified at the Facility, the wastewater, or effluent, is subsequently poured into the Facility’s sand beds. [Id. ¶¶ 67–69]. The

¹ The Groundwater Discharge Permit issued by MassDEP “regulates nitrogen discharges with a view to protecting public drinking water supplies,” but it is not intended to “protect the integrity of surface waterbodies” such as the Lewis Bay Watershed System. [Compl. ¶¶ 74, 76]. According to CLF, the state permit “is not—and does not substitute for—a NPDES permit . . .” [Id. ¶ 78].

Facility releases approximately 1.46 million gallons of effluent every day into its sand beds. [*Id.* ¶ 70]. According to a 2006 report from the Massachusetts Estuaries Project, the median nitrogen concentration of effluent discharged by the Facility “ranges between 4 to 8 mg/L, with an average total nitrogen concentration of 5.51 mg/L.” [*Id.* ¶ 85].² The 2006 report estimated that the Facility discharges 12,947 kilograms of nitrogen through its effluent annually. [*Id.* ¶ 87].

Once the Facility has poured the effluent into its sand beds, the groundwater beneath the sandy soil transports it into the surface waters of the Lewis Bay Watershed System. [Compl. ¶ 92]. CLF claims that since Barnstable is located on “a sandy glacial outwash aquifer,” the effluent travels via groundwater at an average rate of one foot per day and “little to no nitrogen is attenuated[,]” or reduced, by the time the effluent reaches the surface waters of the Lewis Bay Watershed System that is located approximately 1.5 miles away. [*Id.* ¶¶ 54–59]. The Lewis Bay Watershed System is comprised of various surface waters, including Hyannis Inner Harbor, Snows Creek, Stewarts Creek, and Halls Creek. [*Id.* ¶ 90]. The Massachusetts Estuaries Project estimated that the Facility discharges 627 kilograms of nitrogen per year to the Hyannis Inner Harbor; 988 kilograms of nitrogen per year to Halls Creek; 4,219 kilograms of nitrogen per year to Snows Creek; and 7,112 kilograms of nitrogen per year to Stewarts Creek. [*Id.* ¶ 97].

According to CLF, the nitrogen-laden effluent from the Facility “threatens the Lewis Bay Watershed System’s ecological integrity and continued use of these waters by individuals, including CLF members[,]” [Compl. ¶ 99], as the degradation of the system “has negatively impacted [their] ability to recreate in and near these waters and has decreased [their] enjoyment

² According to CLF, the “Massachusetts Estuaries Project is a collaborative effort between local and federal governmental entities, and non-profit and academic institutions, including MassDEP, the University of Massachusetts, the United States Geological Survey, the Cape Cod Commission, with support from, among others, [Barnstable].” [Compl. ¶ 82].

of beach and water activities[,]” [*id.* ¶ 159]. CLF claims that high nitrogen quantities in the Lewis Bay Watershed System have led to “eutrophication,” a process that occurs when plants and algae “experience explosive population growth” and “overwhelm the natural ecosystem.” [*Id.* ¶¶ 99–103]. CLF further asserts that eutrophication is “harmful to both animal and human water-users, frequently causing fish kills and beach closures,” “aesthetically unappealing” red tides, reduced water clarity, and “unpleasant odors.” [*Id.* ¶¶ 107–11].

Pursuant to § 303(d) of the CWA, the Commonwealth of Massachusetts must “identify waters for which effluent limitations normally required are not stringent enough to attain water quality standards and to establish ‘total maximum daily load’ allocations (‘TMDLs’) for such waters in connection with the pollutants of concern.” [*Id.* ¶ 112]. When a state has determined that a TMDL is necessary, it must “submit a proposed TMDL to EPA for the federal agency’s approval.” [*Id.* ¶ 115]. In March 2015, MassDEP submitted a TMDL for the Lewis Bay Watershed System to the EPA stating that nitrogen was a “pollutant of concern” and that the Lewis Bay Watershed System was eutrophic. [*Id.* ¶¶ 117–18].³

After MassDEP submitted this TMDL, Barnstable adopted an “Interim Regulation for the Protection of Saltwater Estuaries” in which the town admitted that “a substantial portion of [Barnstable’s] saltwater estuaries are in jeopardy from the long-term buildup of nitrate-nitrogen, primarily from the subsurface discharge of sewage effluent.” [Compl. ¶¶ 131–32]. Further, in November 2020, Barnstable submitted a Comprehensive Wastewater Management Plan (“the Comprehensive Plan” or the “Plan”) to MassDEP. [*Id.* ¶ 134]. The Comprehensive Plan, which is intended to “satisfy the nutrient removal targets to achieve the TMDLs in the town’s

³ In its TMDL, MassDEP stated that “ecological damage occurs . . . at a nitrogen concentration above 0.38 mg/L” and that “nitrogen concentrations in the surface waters of the Lewis Bay [S]ystem range from 0.42 mg/L to 1.92 mg/L.” [Compl. ¶¶ 119–20].

embayments,” includes a “sewer expansion program which will be completed in three (3), 10-year phases, for a total of a 30 years.” [Id. ¶¶ 137–38]. CLF claims that the Comprehensive Plan will “increase the flow of raw sewage” into the Facility, which currently does not have the capacity to handle the expected increase in effluent disposal. [Id. ¶¶ 139–43]. To meet nitrogen reduction targets, Barnstable states that an “[e]xpansion of the aeration system to accommodate the new [effluent] flows will be required within the first 3-5 years of the plan.” [Id. ¶¶ 144–45]. CLF claims, however, that Barnstable “has not obtained regulatory approvals or financing for construction of any aspect of the [] Plan” and that “[i]n the absence of the planned upgrade of the [Facility’s] nutrient removal technologies and the achievement of an alternative effluent disposal site, [Barnstable] cannot implement the [] Plan to achieve TMDL within the Lewis Bay Watershed System.” [Id. ¶¶ 153–54].⁴

B. Procedural Background

On February 16, 2021, CLF filed a citizen suit under § 505 of the CWA against Barnstable. [Compl.]; see 33 U.S.C. § 1365(a) (detailing CWA's citizen-suit provision authorizing private citizens to bring an action in district court for alleged violations of effluent standards or limitations). In its complaint, CLF specifically alleged that Barnstable violated § 1311(a) of the CWA, which forbids the “discharge of a pollutant” from a “point source” to “navigable waters” without the appropriate NDPS permit from the EPA. [Compl. ¶ 34]; 33 U.S.C. § 1311(a); 33 U.S.C. § 1362(12)(A). CLF seeks declaratory and injunctive relief, costs, attorney’s fees, and civil penalties “of up to \$56,460 per day per violation for all violations of the [CWA] that occurred or occur after November 2, 2015.” [Compl. at 24–25 (describing relief

⁴ CLF adds that “[t]he [] Plan is not legally binding on [Barnstable] and creates no legal consequences that would bear on [Barnstable] if it were to fail fully to implement the [] Plan.” [Compl. ¶ 156].

sought)].⁵ Barnstable moved to dismiss CLF’s complaint on October 1, 2021, [ECF No. 17], and CLF opposed on November 15, 2021, [ECF No. 21]. Barnstable replied on February 18, 2022. [ECF No. 26].

II. LEGAL STANDARD

In reviewing a motion to dismiss under Rule 12(b)(6), the Court must accept as true all well-pleaded facts, analyze those facts in the light most favorable to the plaintiff, and draw all reasonable factual inferences in favor of the plaintiff. See Gilbert v. City of Chicopee, 915 F.3d 74, 80 (1st Cir. 2019). “[D]etailed factual allegations” are not required, but the complaint must set forth “more than labels and conclusions,” Bell Atl. Corp. v. Twombly, 550 U.S. 544, 555 (2007), and must contain “factual allegations, either direct or inferential, respecting each material element necessary to sustain recovery under some actionable legal theory,” Gagliardi v. Sullivan, 513 F.3d 301, 305 (1st Cir. 2008) (quoting Centro Médico del Turabo, Inc. v. Feliciano de Melecio, 406 F.3d 1, 6 (1st Cir. 2005)). The alleged facts must be sufficient to “state a claim to relief that is plausible on its face.” Twombly, 550 U.S. at 570.

“To cross the plausibility threshold a claim does not need to be probable, but it must give rise to more than a mere possibility of liability.” Grajales, 682F.3d at 44–45 (citing Ashcroft v. Iqbal, 556 U.S. 662, 678 (2009)). “A determination of plausibility is ‘a context-specific task that requires the reviewing court to draw on its judicial experience and common sense.’” Id. at 44 (quoting Iqbal, 556 U.S. at 679). “[T]he complaint should be read as a whole, not parsed piece by piece to determine whether each allegation, in isolation, is plausible.” Hernandez-Cuevas v. Taylor, 723 F.3d 91, 103 (1st Cir. 2013) (quoting Ocasio-Hernández v. Fortuño-Burset, 640 F.3d

⁵ According to Barnstable, the total civil penalty amount would exceed \$100,000,000. [ECF No. 17-1 at 8].

1, 14 (1st Cir. 2011)). “The plausibility standard invites a two-step pavane.” A.G. ex rel. Maddox v. Elsevier, Inc., 732 F.3d 77, 80 (1st Cir. 2013) (citing Grajales, 682 F.3d at 45). First, the Court “must separate the complaint’s factual allegations (which must be accepted as true) from its conclusory legal allegations (which need not be credited).” Id. (quoting Morales-Cruz v. Univ. of P.R., 676 F.3d 220, 224 (1st Cir. 2012)). Second, the Court “must determine whether the remaining factual content allows a ‘reasonable inference that the defendant is liable for the misconduct alleged.’” Id. (quoting Morales-Cruz, 676 F.3d at 224).

When reviewing a motion to dismiss, the Court may consider documents outside of the pleadings, “‘the authenticity of which are not disputed by the parties,’ making narrow exceptions to the general rule ‘for official public records; for documents central to plaintiffs’ claim; or for documents sufficiently referred to in the complaint.’” Álvarez-Maurás v. Banco Popular of P.R., 919 F.3d 617, 622–23 (1st Cir. 2019) (quoting Watterson v. Page, 987 F.2d 1, 3 (1st Cir. 1993)).

III. DISCUSSION

A. The History of the Federal Clean Water Act

The goal of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). To preserve this goal, the CWA prohibits “the discharge of any pollutant by any person” from a “point source” to the waters of the United States without an NPDES permit from the EPA. Id. §§ 1311(a), 1362(12)(A); see South Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians, 541 U.S. 95, 102 (2004) (explaining that “NPDES requires dischargers to obtain permits that place limits on the type and quantity of pollutants that can be released into the Nation’s waters”); see also Am. Iron & Steel Inst. v. EPA, 115 F.3d 979, 990 (D.C. Cir. 1997) (stating that “[t]he centerpiece of the CWA is the NPDES permitting program”). Under the CWA, the term “pollutant” includes “sewage,”

“sewage sludge,” “biological materials,” and “chemical wastes.” 33 U.S.C. § 1362(6). The CWA defines “point source” broadly to include “any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.” 33 U.S.C. § 1362(14).

Before the CWA was enacted in 1972, the regulation of water pollution and the setting of water quality standards in the United States was handled by federal and state governments. See EPA v. California ex rel. State Water Res. Control Bd., 426 U.S. 200, 202–03 (1976). When Congress passed the CWA, however, it “intended to leave substantial responsibility and autonomy to the [s]tates” specifically regarding “groundwater pollution and nonpoint source pollution” See Cnty. of Maui v. Hawai’i Wildlife Fund, 140 S. Ct. 1462, 1472 (2020) (stating that the omission of groundwater and nonpoint source pollution from the CWA was a deliberate choice). The rationale behind Congress’s decision was that states had “[already] developed methods of regulating nonpoint source pollution through water quality standards, and otherwise.” Id. at 1471.

Between the enactment of the CWA in 1972 and the Supreme Court’s decision in Maui in 2020, courts were largely divided over whether liability under the CWA extended to pollutants that left a “point source” and then traveled through groundwater before reaching navigable waters. See Hawai’i Wildlife Fund v. Cnty. of Maui, 24 F. Supp. 3d 980, 995 (D. Haw. 2014) (stating “that Congress sought to include sufficiently ‘confined and discrete’ groundwater conduits as ‘point sources’ under the [CWA]”); see also Hernandez v. Esso Standard Oil Co. (P.R.), 599 F. Supp. 2d 175, 181 (D.P.R. 2009) (ruling that “the CWA extends federal jurisdiction over groundwater that is hydrologically connected to surface waters that are

themselves waters of the United States”); but see Tri-Realty Co. v. Ursinus Coll., 124 F. Supp. 3d 418, 459 (E.D. Pa. 2015) (holding that the “discharge of pollutants into navigable waters occurring only through migration of groundwater and uncontrolled soil runoff” is not beholden to the CWA because it signifies “nonpoint source” pollution); see also Cape Fear River Watch, Inc. v. Duke Energy Progress, Inc., 25 F. Supp. 3d 798, 810 (E.D.N.C. 2014) (explaining that “Congress did not intend for the CWA to extend federal regulatory authority over groundwater, regardless of whether that groundwater is eventually or somehow ‘hydrologically connected’ to navigable surface waters”); Conservation Law Found. Inc. v. Longwood Venue & Destinations, 422 F. Supp. 3d 435, 458 (D. Mass. 2019) (holding that groundwater discharges were categorically exempt from NPDES permitting requirements).

B. Introducing the Functional Equivalent Test in Maui

In Maui, the Supreme Court settled the longstanding debate over whether the CWA applied to groundwater discharges. 140 S. Ct. at 1468. The Court held that CWA jurisdiction attaches “if the addition of the pollutants through groundwater is the functional equivalent of a direct discharge from the point source into navigable waters.” Id. In that case, the petitioner, the County of Maui, operated a wastewater treatment facility in Maui, Hawai’i. Id. at 1469. The County released four million gallons of effluent from its facility each day, which then traveled a minimum distance of 0.3 to 1.5 miles via groundwater for approximately 84 days before it reached the ocean. Id.; Hawai’i Wildlife Fund v. Cnty. of Maui, 550 F. Supp. 3d 871, 888 (D. Haw. 2021). The respondents, which included various environmental organizations, brought a citizens’ lawsuit against the County under § 505 of the CWA. Maui, 140 S. Ct. at 1468. The district court held that the effluent discharge from the County’s facility into the nearby groundwater was “functionally one into navigable water” and that the CWA therefore applied.

Hawai'i Wildlife Fund, 24 F. Supp. 3d at 998. The Ninth Circuit affirmed, although the court applied a different test to determine whether the CWA attached, holding that an NDPES permit was required when “pollutants are fairly traceable from the point source to a navigable water” Hawai'i Wildlife Fund v. Cnty. of Maui, 886 F.3d 737, 749 (9th Cir. 2018). The County appealed, and the Supreme Court granted certiorari. Maui, 140 S. Ct. at 1469.

The Supreme Court focused on the meaning of “from” in the statute and on whether “pollution that reaches navigable waters only through groundwater” is “‘from’ a point source.” Maui, 140 S. Ct. at 1470. The Court rejected the Ninth Circuit's view that the CWA applies if the pollutant is “fairly traceable” to a point source “even if it traveled long and far (through groundwater) before it reached navigable waters,” warning that adopting such an expansive reading of “from” would “require a [NDPES] permit in surprising, even bizarre, circumstances,” such as “the 100-year migration of pollutants through 250 miles of groundwater to a river.” Id. at 1470–71. The Court, however, also rejected the petitioner’s “bright-line” view that “if ‘at least one nonpoint source (e.g., unconfined rainwater runoff or groundwater)’ lies ‘between the point source and the navigable water,’ then the [NDPES] permit requirement ‘does not apply.’” Id. at 1470. In the end, the Court settled on a middle ground position, holding that a permit is required “if the addition of the pollutants through groundwater is the functional equivalent of a direct discharge from the point source into navigable waters.” Id. at 1468. The Court reasoned that this approach would prevent the EPA from “assert[ing] [its] authority over the release of pollutants that reach navigable waters many years after their release”; after all, “[v]irtually all water, polluted or not, eventually makes its way to navigable water.” Id. at 1470. At the same time, the Court observed that blocking the EPA from exerting its authority over pollutants that travel through “any amount of groundwater before reaching navigable waters” would “risk

serious interference with EPA’s ability to regulate ordinary point source discharges.” Id. at 1473.⁶ The Court reasoned that the “functional equivalent” test would help to avoid both extremes. Id. at 1477.

Recognizing that the functional equivalent approach “does not, on its own, clearly explain how to deal with middle instances,” the Court also set forth a non-exhaustive list of factors that “may prove relevant” in determining whether an indirect discharge through groundwater constitutes the functional equivalent of a direct discharge:

(1) transit time, (2) distance traveled, (3) the nature of the material through which the pollutant travels, (4) the extent to which the pollutant is diluted or chemically changed as it travels, (5) the amount of pollutant entering the navigable waters relative to the amount of the pollutant that leaves the point source, (6) the manner by or area in which the pollutant enters the navigable waters, (7) the degree to which the pollution (at that point) has maintained its specific identity.

Maui, 140 S. Ct. at 1476–77.

Among these several factors, the Court underscored that “[t]ime and distance are obviously important” and “will be the most important factors in most cases, but not necessarily every case.” Id. To reinforce this point, the Court hypothesized that a pipe that “ends 50 miles from navigable waters and . . . [emits pollutants that] end up in navigable waters only many years later . . .” would “likely” not require an NDPES permit. Id. at 1476. The Court emphasized that the focus on time and distance both aligns with the statutory purposes that Congress sought to achieve with the CWA, and also conforms with EPA’s historical opposition to applying the CWA’s permitting requirements to discharges that reach groundwater “only after lengthy

⁶ In discounting this approach, the Court stated that such a “bright-line” test would create “large and obvious loophole[s]” in the CWA. Maui, 140 S. Ct. at 1473. For example, the owner of a pipe that spews pollutants directly into the ocean could “simply move the pipe back, perhaps only a few yards, so that the pollution must travel through at least some groundwater before reaching the sea . . .” Id.

periods.” Id. at 1472, 1476 (citing United States’ arguments in McClellan Ecological Seepage Situation (MESS) v. Cheney, 763 F. Supp. 431, 437 (E.D. Cal. 1989) and Greater Yellowstone Coal. v. Larson, 641 F. Supp. 2d 1120, 1139 (D. Idaho 2009) that permitting requirements do not apply if it would take dozens or hundreds of years for pollutants to reach navigable waters). Outside of the listed factors, the Court also stated that “[d]ecisions should not create serious risks either of undermining state regulation of groundwater or of creating loopholes that undermine the [CWA’s] basic federal regulatory objectives.” Maui, 140 S. Ct. at 1477.

The Court vacated the Ninth Circuit’s judgment and remanded the case for further proceedings consistent with the Court’s opinion. Maui, 140 S. Ct. at 1478. On remand, the District of Hawai’i found that the County of Maui’s discharge was indeed the “functional equivalent” of a direct discharge. Hawai’i Wildlife Fund, 550 F. Supp. 3d at 893. The time and distance that the pollutants traveled from the County’s facility to the Pacific Ocean ultimately proved to be the determinative factors in the court’s analysis. Id. at 885, 889. The court referred to a study which found that it took “as little as 84 days” for the pollutants to travel via groundwater before they reached the ocean located approximately 1 to 1.5 miles away and held that the time and distance metrics in the case before it were “far from the extreme[s]” outlined by the Supreme Court and thus warranted CWA jurisdiction. Id. at 885–87. In addition, the court cited to the fact that “100 percent of the wastewater” ended up in the ocean and that it “maintain[ed] its specific identity as polluted water,” albeit with less nitrogen by the time it reached the ocean. Id. at 890. Weighing these factors together, the court held that the County’s facility required an NDPES permit. Id. at 893.

C. Applying the Functional Equivalent Test

In its opposition to Barnstable’s motion to dismiss, CLF claims that it “has alleged sufficient facts to plead a plausible claim that [Barnstable] is violating the [CWA] by discharging nitrogen pollution into the surface waters of the Lewis Bay Watershed without a permit.” [ECF No. 21 at 6]. Barnstable, on the other hand, argues that the estimated time (over 21 years) and distance (approximately 1.5 miles) that it takes for the effluent to flow from its Facility to the Lewis Bay Watershed System is precisely the kind of discharge that the Supreme Court sought to exclude from being considered the “functional equivalent” of a direct discharge. [ECF No. 17-1 at 5–6]. Applying the specific facts of the case to the standard set forth under Mauí and the statutory objectives of the CWA, this Court finds the Facility’s discharge is too remote to implicate the permitting requirements of the CWA.

1. CLF Fails to State a Claim for Relief Because the Approximate Transit Time and Distance Traveled—the Two Most Important Factors Under the Functional Equivalent Test—Are Too Long to Implicate the CWA

In its complaint, CLF states that after the effluent is discharged from the Facility, it “travels towards the coastal waters at an average rate of one foot per day.” [Compl. ¶ 60]. While CLF does not provide an estimate of how long it would take the effluent to travel from the Facility to the Lewis Bay Watershed System, as Barnstable points out in its motion to dismiss, “simple math reflects that the ‘travel time’ for the discharge is . . . more than twenty-one (21) years” when the approximate distance (1.5 miles) from the Lewis Bay Watershed System is multiplied by the rate of transit (one foot per day). [ECF No. 17-1 at 6]. CLF claims that the transit time is still a “disputed factual issue” that deserves to be “addressed in discovery[.]” [ECF No. 21 at 11–12], but does not allege any facts to suggest that discovery is likely to reveal a different outcome. The “one foot per day” rate is derived from the TMDL for the Lewis Bay

Watershed System, which was prepared by the relevant regulatory authority, MassDEP, and approved by the EPA pursuant to Section 303(d) of the CWA. See [ECF No. 17-1 at 7 n.4]; EPA, Lewis Bay System and Halls Creak Total Maximum Daily Loads for Total Nitrogen, 4 (2015), https://attains.epa.gov/attains-public/api/documents/actions/MA_DEP/64146/107187; see also Parker v. Landry, 935 F.3d 9, 19 (1st Cir. 2019) (the plausibility pleading standard cannot save a complaint that does not “set forth facts sufficient to create a reasonable expectation that discovery would be anything more than a shot in the dark.”) (citing Twombly, 550 U.S. at 556)).

Because the approximate travel time is 21 years, the Facility’s effluent release does not constitute the “functional equivalent” of a direct discharge for the purposes of requiring an NPDES permit. This is consistent with the Supreme Court’s caution in Maui that liability under the CWA does not extend to “pollutants that reach navigable waters many years after their release.” 140 S. Ct. at 1465. CLF argues that the functional equivalent test is a “highly fact-specific” inquiry and that transit time and distance should not be dispositive because they are “just two of the seven examples of factors that [the] Court stated ‘may prove relevant (depending upon the circumstances of a particular case).’” [ECF No. 21 at 12, 17]. While the list of factors set forth under the functional equivalent test is indeed non-exhaustive, the Court emphasized time and distance as the “most important factors in most cases,” Maui, 140 S. Ct. at 1471, and also highlighted the need for a limited time period, id. at 1470 (stating that the fairly traceable test “may well allow EPA to assert permitting authority over the release of pollutants that reach navigable waters many years after their release” which would contradict the purpose and

history of the CWA).⁷ Therefore, while time may not be the single determining factor in the functional equivalent test, it must be given substantial weight.

CLF claims that even if transit time is an important factor in the functional equivalent inquiry, 21 years is still well outside the “100-year migration of pollutants” that the Court referenced as an example of when CWA liability should not attach. [ECF No. 21 at 19]; Maui, 140 S. Ct. at 1471. This Court understands the one hundred years to be an example of an excessive time period rather than the outside limit of the CWA’s permitting authority. See also Hawai’i Wildlife Fund, 550 F. Supp. 3d at 886 (emphasizing that “the Supreme Court set its extreme at ‘many years,’ not at ‘many months,’ and not even at one year or two years.”). Further, no case decided since Maui has come close to finding that 21 years is a permissible transit time for CWA liability. See id. at 886–87 (holding on remand that a pollutant transit time of approximately 84 days was sufficient to implicate the CWA’s permitting requirements); see also Black Warrior River-Keeper, Inc. v. Drummond Co., Inc., No. 16-cv-01443, 2022 WL 129495, at *5 (N.D. Ala. January 12, 2022) (granting summary judgment to plaintiff who filed CWA claim against mining company that discharged pollutants that traveled via groundwater for approximately 1.5 to 14.6 days before reaching navigable waters); Peconic Baykeeper, Inc. v. Harvey, No. 13-cv-6261, 2021 WL 4755623, at *7 (E.D.N.Y. May 21, 2021) (suggesting that an effluent discharge which “take[s] only weeks to reach [navigable] waters” via groundwater weighs in favor of CWA liability). CLF may emphasize that the Maui Court recognized that transit time and distance would not always be the most important factors in a given case, but the transit time alleged in this case (21 years) is so great that it is difficult to minimize its

⁷ The Court added that “Congress did not intend to provide EPA with such broad authority” when it created the CWA and that “the [CWA’s] legislative history strongly supports the conclusion that the permitting provision does not extend so far.” Maui, 140 S. Ct. at 1465.

significance under a functional equivalent analysis. [ECF No. 21 at 17]; Maui, 140 S. Ct. at 1476–77.

Although the approximate distance that the effluent travels from the Facility to the Lewis Bay Watershed System does not weigh as strongly in favor of Barnstable as the approximate transit time, when the actual distance (1.59–1.88 miles) is calculated and considered alongside transit time, the distance factor does lean in Barnstable’s favor. [ECF No. 17-1 at 7]. The Court agrees with CLF that the approximate distance at issue in this case “is far closer to the pollutants traveling a few feet through groundwater than to the 50 miles rendering permits unlikely [as referenced in Maui][,]” [ECF No. 21 at 18 (internal quotation marks omitted)], but just as the “100-year migration of pollutants” referenced by the Court was merely an illustrative example for transit time, the fifty-mile reference was similarly not intended to set a minimum distance required for CWA enforcement, Maui, 140 S. Ct. at 1471. In addition, as Barnstable points out, the distance from the Facility to the Lewis Bay Watershed System is actually between 1.59 and 1.88 miles and this estimate “would be giving CLF the benefit of an assumption that the groundwater flows in a perfectly straight line.” [ECF No. 17-1 at 7–8]. Using this distance, even assuming a straight line, would increase the estimated transit time from 21 years to between 23–27 years. [ECF No. 26 at 6].

To bolster its argument regarding the distance issue, CLF asserts that “the 1.5-mile distance here is consistent with the ‘minimum distance of between 0.3 and 1.5 miles’ found sufficiently close by the District of Hawai’i on remand.” [ECF No. 21 at 18 (quoting Hawai’i Wildlife Fund, 550 F. Supp. 3d at 888)]. While this may be true, CLF fails to recognize that in Hawai’i Wildlife Fund, the effluent traveled rapidly through groundwater a minimum distance of 0.3 to 1.5 miles away for approximately 84 days (compared to 21 years here) before it reached

the ocean. 550 F. Supp. 3d at 883–88. The district court held that when the estimated transit time and distance were considered together as part of the multifactor functional equivalent test, an NDPES permit was required. Id. at 893. As the Supreme Court outlined in Maui, the functional equivalent test “depend[s] upon the circumstances of a particular case.” 140 S. Ct. at 1476. While the distance in Hawai’i Wildlife Fund may be similar to the distance at issue here, the totality of the circumstances is too unique to draw such a close comparison between the two cases.

Given the direct correlation between transit time and distance in this case and the high probability that the approximate distance is more than just 1.5 miles exactly, the distance factor weighs in favor of Barnstable.

2. Application of the Remaining Factors of the Functional Equivalent Test Do Not Compel an Alternative Outcome

As to the remaining Maui factors, CLF claims that (1) the nature of material through which the pollutant travels, (2) the extent to which the pollutant is diluted or chemically changed as it travels, (3) the amount of pollutant entering navigable waters, and (4) the degree to which pollution has maintained its specific identity favor denying Barnstable’s motion to dismiss. [ECF No. 21 at 12–14].⁸

With regards to these factors, CLF contends as follows: (1) the “nitrogen in wastewater that is discharged into the ground on Cape Cod travels rapidly through the permeable sandy soil to navigable waters” and that “[t]he exact nature of the material that [Barnstable’s] discharges travel through and the impact, if any, of that material on [Barnstable’s] discharges are issues for

⁸ In response to these claims, Barnstable states that “[t]hough these allegations, if true, might meet the [Ninth Circuit’s] ‘fairly traceable’ standard, applying the ‘most important’ time and distance factors pled by CLF preclude CLF from demonstrating ‘functional equivalence’ in this case and require dismissal of the Complaint.” [ECF No. 26 at 8].

discovery and expert testimony[]”; (2) “that the nitrogen pollutants discharged into the soil percolates rapidly through groundwater and then to navigable waters with little to no change in the nitrogen concentration[]”; (3) that “effectively all of the nitrogen pollutants from [the] Facility enters navigable waters[]; and (4) that “the nitrogen pollution that enters the groundwater is not altered before entering surface waters.” [ECF No. 21 at 12–14]. CLF additionally claims that the (1) sheer volume of Barnstable’s nitrogen discharges, (2) the regulatory recognition of ecological damage, and (3) the overall impact to the Lewis Bay Watershed ecosystem favor the application of the CWA to Barnstable’s discharges. [*Id.* at 14–16]; *see Maui*, 140 S. Ct. at 1476 (stating that “there are too many potentially relevant factors applicable to factually different cases for this Court now to use more specific language”).

While the aforementioned factors may well weigh in CLF’s favor, relying on these factors when the approximate transit time is so substantial (over 21 years) would undermine the Court’s deliberate focus on time and distance when it disavowed the “fairly traceable” approach, which it criticized as overly broad. *See Maui*, 140 S. Ct. at 1465, 1476 (rejecting the “fairly traceable” approach because it risked extending CWA’s permitting requirements to discharges that “end up in navigable waters only many years later”); *see also Hawai’i Wildlife Fund*, 550 F. Supp. 3d at 885 (stating that the court “pa[id] particular attention to the time and distance factors” in its analysis); *see also Black Warrior River-Keeper*, 2022 WL 129495, at *9 (noting that time and distance are the most important factors to be considered in most cases); *see also Peconic*, 2021 WL 4755623, at *7 (stating that “transit time and distance traveled are often the most important factors under *Maui*”).⁹

⁹ Although the court in *Peconic* found that the transit time and “short” distance weighed in favor of applying the CWA’s permitting requirements, summary judgment for the plaintiffs was denied

3. Permitting CLF To Move Forward Would Undermine State Regulation of Groundwater Discharges—A Key Tenet of the CWA and the Supreme Court’s Holding in Maui

In Maui, the Court stated that “[d]ecisions should not create serious risks . . . of undermining state regulation of groundwater” 140 S. Ct. at 1477. The Court reasoned that the CWA “intended to leave substantial responsibility and autonomy to the [s]tates” and that Congress envisioned “EPA’s role in managing nonpoint source pollution and groundwater pollution as limited to studying the issue, sharing information with and collecting information from the states, and issuing monetary grants.” Id. at 1471.

Here, Barnstable’s Facility is already “fully permitted under the state law regime for groundwater discharges.” [ECF No. 26 at 9]. In addition, MassDEP, a state authority, has submitted a TMDL for the Lewis Bay Watershed System to the EPA, which the agency has subsequently reviewed and approved. [Id.]. Barnstable has also commenced a thirty-year, one-billion-dollar wastewater management plan to “comply with the applicable TMDLs” and “reduc[e] nitrogen in surface waters.” [Id. at 9–10]. Aside from criticizing inadequacies and administrative delays in Barnstable’s proposed management plan, [Compl. ¶¶ 131–56], CLF does not point to any convincing evidence to prove that Barnstable and the state are not committed to addressing nitrogen pollution in the Lewis Bay Watershed System; rather, the TMDL and the thirty-year management plan suggest quite the opposite. CLF argues that allowing their claim to proceed will not undermine state authority because this case is “highly fact specific[,]” “turn[s] largely on the unique geology of Cape Cod[,]” and because the Lewis Bay Watershed System is one of the highest water pollution priorities in Massachusetts, [ECF

because the remaining factors under the functional equivalent analysis “remain[ed] sharply in dispute” among the parties. 2021 WL 4755623, at *7.

No. 21 at 20–22], but none of this justifies the Court extending federal authority in such a way that would undermine the existing efforts of state and local authorities in Massachusetts to regulate the state’s land and groundwater—an outcome that the Supreme Court explicitly rejected in Maui, 140 S. Ct. at 1477.

4. Granting Barnstable’s Motion to Dismiss Will Not Interfere with Congress’s Objectives by Creating an Unreasonable Loophole in the CWA

In addition to cautioning against decisions that undermine state regulation of groundwater, the Supreme Court held that decisions should not “create[e] loopholes that undermine the [CWA’s] basic federal regulatory objectives.” Maui, 140 S. Ct. at 1477. As an example of an obvious loophole, the Court referenced a scenario where a pipe owner “move[s] the pipe back, perhaps only a few yards” from navigable water, to avoid a direct discharge. Id. at 1473. CLF claims that failing to apply the CWA’s permitting requirements to the Facility would create an unreasonable loophole in federal regulation, citing to the fact that “[t]he [CWA] was purposefully designed to be broad . . . [because] it bans ‘any addition of any pollutant to navigable waters from any point source.’” [ECF No. 21 at 20]; 33 U.S.C. § 1362(12)(A). First, while the statutory language of the CWA may be broad, the Supreme Court, consistent with its view of congressional intent, narrowed the CWA’s permitting requirements by exempting discharges “that reach[ed] navigable waters many years after their release.” Maui, 140 S. Ct. at 1470. Therefore, declining to extend CWA liability to a discharge that travels for over 21 years would not be creating an unreasonable loophole; rather, it would be following the framework established by the Supreme Court and consistent with the underlying objectives of the CWA. Second, the discharge of pollutants from the Facility is easily distinguishable from the Court’s example of an obvious loophole involving a pipe being moved just a few yards back from the

ocean. See [Compl. ¶¶ 60, 94–95]; Maui, 140 S. Ct. at 1473. Third, excluding Barnstable from CWA’s permitting requirements would not be letting Barnstable off the hook from regulation where the Facility is already subject to state regulation, [Compl. ¶ 73]; MassDEP has prepared a TMDL for the Lewis Bay Watershed System that the EPA has approved, [id. ¶ 116]; and Barnstable has submitted a thirty-year management plan to MassDEP to comply with the TMDL, [id. ¶ 134].

IV. CONCLUSION

Because CLF has not pled facts sufficient to establish that Barnstable’s release of effluent constitutes the functional equivalent of a direct discharge under Supreme Court precedent, the Court must dismiss the complaint. Regardless of this outcome, clean water and the environmental integrity of the Lewis Bay waters remain critically important. Based on the facts presently before the Court, it is, for now, the responsibility of Barnstable and the Commonwealth of Massachusetts to regulate the Facility’s groundwater discharges. The Court expects, based on the representations made in this case, that these entities recognize the importance of reducing nitrogen discharges to prevent further degradation of the environmental quality of the Lewis Bay Watershed System and will act accordingly.

The motion to dismiss, [ECF No. 17], is, albeit reluctantly, GRANTED.

SO ORDERED.

July 20, 2022

/s/ Allison D. Burroughs
ALLISON D. BURROUGHS
U.S. DISTRICT JUDGE